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EXAMINER	
POLLACK, MELVIN H	

ART UNIT	PAPER NUMBER
2145	

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/681,510	PIERCE, SHAUN D.	
	Examiner	Art Unit	
	Melvin H. Pollack	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 January 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *see attached office action*.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 21 February 2006 have been fully considered but they are not persuasive. An analysis of the reasoning is supplied below.

2. Applicant argues that each independent claim includes its own unique combination of elements, and that each claim differs from each other when taken as a whole (P. 18). The examiner agrees, and has taken steps to analyze each claim separately, in such cases where a later independent claim is not merely a broader version of an earlier claim. In the particular case of claims 16 and 34, claim 34 is merely a broader version of claim 16 such that any art shown to read on claim 16 must read on claim 34. Claim 34 adds no limitations that are not in claim 16, and thus adds no limitations that the examiner has not searched and considered.

3. Applicant argues that no art of record, either alone or in any combination, suggests using a tree structure for information about nodes of an instantaneous wireless network (P. 20). Applicant has failed, however, to show the failure of Morris in view of Briancon to teach this combination, wherein Morris teaches the storage of node information, and Briancon adds that the storage method may be a tree structure. Applicant cannot respond further to this allegation unless applicant specifies why Briancon does not teach a tree structure.

4. In response to applicant's argument that Briancon is nonanalogous art (P. 21), it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both systems are drawn to

information exchange and synchronization of said information, wherein Briancon provides details regarding storage techniques that Morris lacks, as shown in the last office action. While information exchange over ad hoc/instantaneous wireless networks is not required, it is noted that Briancon does teach an embodiment that utilizes such networks (col. 4, lines 10-45). Therefore, Briancon is analogous art.

5. Applicant claims that Morris in view of Briancon does not expressly disclose that levels between nodes of a tree data structure may indicate degrees of separation between wireless devices represented by the nodes. Briancon does, in fact, teach this added limitation (col. 4, lines 35-57).

6. Therefore, the rejection is maintained for the reasons above, and is made final.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-8, 12, 13, 33 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris et al. (6,691,173) in view of Briancon (6,640,222).

9. For claim 1, Morris teaches a method (abstract; col. 1, line 1 – col. 2, line 55) comprising:

a. Establishing an instantaneous network (col. 3, lines 25-40) between a first mobile device (Fig. 1, #10, M1) and a second mobile device (Fig. 1, #20, M2), each mobile device having ad hoc networking capability (col. 1, lines 10-60);

b. Sending first information from the first mobile device to the second mobile device automatically (col. 2, lines 7-11), the first information including at least information received by the first mobile device (col. 2, lines 3-7) from the one or more third devices other than the first mobile device and the second mobile device (Fig. 1, #10, S1, S2, S6 and S7) during at least one instantaneous network previously established between the first mobile device and the one or more third devices (col. 2, lines 19-22); and

c. Storing the first information at the second mobile device (Fig. 2, #130);

d. Wherein the first mobile device is not part of the at least one instantaneous network previously established between the first mobile device and the one or more third devices during the establishing and the sending (col. 5, lines 20-45)

10. Morris does not expressly disclose information storage of any particular type, let alone within a tree structure. Briancon teaches a method (abstract) of data handling and synchronization (col. 1, lines 8-11) for information about nodes of an instantaneous wireless network (col. 4, lines 10-35) in which storage structures are tree structures (col. 4, lines 35-45). At the time the invention was made, one of ordinary skill in the art would have used a tree structure in Morris for better searching and estimating purposes (col. 3, lines 19-25).

11. For claim 2, Morris teaches that the instantaneous network between the first mobile device and the second mobile device is a piconet (col. 3, lines 15-25).

12. For claim 3, Morris teaches that the method further comprises:

a. Sending (Fig. 3, #184) second information from the second mobile device to the first mobile device (col. 2, lines 15-20), the second information including at least information received by the second mobile device (col. 2, lines 11-15) from one or more fourth

devices other than the first mobile device and the second mobile device (Fig. 1, #20, S3 and S5) during at least one instantaneous network previously established between the second mobile device and the one or more fourth devices (col. 3, line 50 – col. 4, line 25); and

b. Storing the second information at the first mobile device in a structure (Fig. 2, #130) in which the first information has already been stored (col. 6, lines 45-55).

13. Morris does not expressly disclose information storage of any particular type, let alone within a tree structure. Briancon teaches a method (abstract) of data handling and synchronization (col. 1, lines 8-11) for information about nodes of an instantaneous wireless network (col. 4, lines 10-35) in which storage structures are tree structures (col. 4, lines 35-45). At the time the invention was made, one of ordinary skill in the art would have used a tree structure in Morris for better searching and estimating purposes (col. 3, lines 19-25).

14. For claim 4, Morris teaches that the first information is stored at the second mobile device in a structure in which the second information has already been stored (col. 6, lines 45-55).

15. For claims 5 and 43, Morris does not expressly disclose that each of the structure at the first mobile device and the structure at the second mobile device is a tree structure. Briancon teaches a method (abstract) of data handling and synchronization (col. 1, lines 8-11) in which storage structures are tree structures (col. 4, lines 35-45). Briancon further teaches that the tree data structures indicate how many degrees of separation there are between given nodes stored in the first and second tree data structures and nodes representing the first and second mobile devices, respectively (col. 4, lines 35-57). At the time the invention was made, one of ordinary

skill in the art would have used a tree structure in Morris for better searching and estimating purposes (col. 3, lines 19-25).

16. For claim 6, Morris teaches that the first information includes identity information regarding each of the one or more third devices and identity information regarding the first mobile device (Table II).

17. For claim 7, Morris teaches that the first information includes one or more of: advertising information and dating information (col. 3, lines 55-57, service advertisement).

18. For claim 8, Morris teaches that the first information is divided into nodes (Table I).

19. For claim 12, Morris teaches that the at least one of the one or more third devices is a mobile device (col. 6, lines 20-25; device = laptop).

20. For claim 13, Morris teaches that the at least one of the one or more third devices and the one or more fourth devices is a stationary device (col. 6, lines 20-25; device = desktop).

21. For claim 33, Morris teaches a method (abstract) for communicating information (col. 1, lines 5-10) from a first device (Fig. 1, #10, M1) to a second device (Fig. 1, #20, M2) via an intermediary mobile device (Fig. 1, S4), each of the first device, the second mobile device and the intermediary mobile device having ad hoc networking capability (col. 1, lines 10-65), the method comprising:

a. Providing a first ad hoc network including at least the first device and the intermediary mobile device (col. 3, lines 25-40);

b. Transmitting information from the first device to the intermediary mobile device through the first ad hoc network through which the information is provided from the first device to the intermediary mobile device (col. 2, lines 3-11);

c. Storing the information in the intermediary mobile device (Fig. 2, #130);

d. Permitting the first ad hoc network to dissipate at least with respect to the intermediary mobile device (col. 5, lines 20-45);

e. Establishing, after the dissipation; a second ad hoc network including at least the intermediary mobile device and the second mobile device (col. 3, lines 25-65; col. 5, lines 45-65); and

f. Automatically sending the information from the intermediary mobile device to the second mobile device (col. 2, lines 11-20).

22. Morris does not expressly disclose information storage of any particular type, let alone within a tree structure. Briancon teaches a method (abstract) of data handling and synchronization (col. 1, lines 8-11) for information about nodes of an instantaneous wireless network (col. 4, lines 10-35) in which storage structures are tree structures (col. 4, lines 35-45). At the time the invention was made, one of ordinary skill in the art would have used a tree structure in Morris for better searching and estimating purposes (col. 3, lines 19-25).

23. Claims 9-11, 14, 16-32, 34, 36, 40-42, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris and Briancon as applied to claims 1 and 8 above, and further in view of Hild et al. (6,532,368).

24. For claim 9, Morris does not expressly disclose that each node contains an associated decay value, such that information contained in the node decays over time and the node is deleted upon expiration. Hild teaches a method (abstract) of sharing service advertisements through an ad-hoc wireless network (col. 1, line 1 - col. 6, line 15) in which an associated decay

value ("expiry time") follows these limitations (col. 8, lines 33-47). At the time the invention was made, one of ordinary skill in the art would have used an expiry time in Morris data in order to implement more advanced device-tracking techniques desired in Morris (col. 5, lines 20-55) and Hild (col. 4, lines 30-45).

25. For claim 10, Morris teaches that storing the first information at the second mobile device comprises copying each node of the first information into the structure (Table IV), but does not expressly disclose including the associated decay value contained in the node. Hild teaches this limitation (Fig. 2, "expiry time"). At the time the invention was made, one of ordinary skill in the art would have used this storage in Morris in order to determine if the device is present and still providing said service (col. 12, lines 9-45).

26. For claim 11, Morris teaches that storing the first information at the second mobile device comprises copying each node of the first information into the structure (Table III), but does not expressly disclose updating the associated decay value contained in the node. Hild teaches this limitation (col. 8, lines 47-60). At the time the invention was made, one of ordinary skill in the art would have added these features to Morris in order to assist in service updating (col. 8, line 65 – col. 9, line 3) and to fulfill Morris' desire to update advertisements (Morris, col. 5, lines 5-20).

27. For claim 14, Morris teaches that the first information decays over time, such that the first information is deleted upon expiration. Hild teaches these limitations (col. 8, lines 33-47). At the time the invention was made, one of ordinary skill in the art would have used an expiry time in Morris data in order to implement more advanced device-tracking techniques desired in Morris (col. 5, lines 20-55) and Hild (col. 4, lines 30-45).

28. Claim 16 is drawn to the limitations drawn in claim 1, but adds exchanging configuration information between the devices, each of the first device and the second device having a current configuration selected from at least a send-only configuration and a send-and-receive configuration, the sending of information based on the configuration of each device. Morris does disclose the exchange of configuration information (col. 4, line 30 – col. 5, line 5), but does not expressly disclose the transfer of data related to send/receive preferences. Morris teaches these limitations (col. 9, lines 4-25). At the time the invention was made, one of ordinary skill in the art would have used this feature in Morris in order to conserve power (col. 9, line 7). Therefore, since claim 1 is rejected, and given the teachings above, claim 16 is also rejected for the reasons above. In this embodiment, the first and second mobile devices of claim 1 may or may not be mobile, and are thus referred to as first and second devices.

29. Claims 17-23 are drawn to the limitations drawn in claims 2-4 and 8-11, respectively. Therefore, since claims 2-4 and 8-11 are rejected, claims 17-23 are also rejected for the reasons above.

30. For claim 24, Morris teaches that the at least one of the first device and the second device is a mobile device (col. 6, lines 20-25; device = laptop).

31. For claim 25, Morris teaches that the at least one of the first device and the second device is a stationary device (col. 6, lines 20-25; device = desktop).

32. For claim 26, Morris teaches that the first device has Bluetooth communication capability that enables the ad hoc networking capability (col. 3, lines 13-25).

33. For claim 27, Morris does not expressly disclose that the first device has 802.11b communication (Wi-fi) capability that enables the ad hoc networking capability. Morris does

teach that other wireless protocols may be used (col. 3, lines 20-25) and that a first piconet may have a different protocol from a second piconet (col. 3, lines 35-40). Hild teaches this limitation (col. 4, lines 5-45; col. 9, lines 35-67). At the time the invention was made, one of ordinary skill in the art would have used wireless LAN to connect with existing ad-hoc wireless networks and to allow power conservation (col. 9, lines 38-40).

34. Claims 28 and 29 are drawn to the limitations drawn in claims 16 and 17, respectively. Therefore, since claims 16 and 17 are rejected, claims 28 and 29 are also rejected for the reasons above.

35. For claim 30, Morris teaches that the device is a mobile device selected from a group of mobile devices comprising: a wireless phone and a personal-digital assistant (PDA) device (col. 6, lines 20-25; device = hand-held electronic organizer).

36. Claim 31 is drawn to a the limitations drawn in claims 8 and 9. Therefore, since claims 8 and 9 are rejected, claim 31 is also rejected for the reasons above.

37. For claim 32, Morris teaches that the device comprises one or more of: an input component and a display component (col. 6, lines 20-25; devices listed inherently have input and display components by definition).

38. Claims 34 and 36 are drawn to the limitations in claim 16. Therefore, since claim 16 is rejected, claims 34 and 36 are also rejected for the reasons above.

39. Claims 37-39 are drawn to the limitations in claims 6, 9, and 7, respectively. Therefore, since claims 6, 7, and 9 are rejected, claims 37-39 are also rejected for the reasons above.

40. Claims 40-42 and 44 are drawn to the limitations in claim 5. Therefore, since claim 5 is rejected, claims 40-42 and 44 are also rejected for the reasons above.

41. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morris and Hild as applied to claim 34 above above, and further in view of Briancon, as applied to claim 5 above.

42. Claim 35 is drawn to the limitations in claim 5. Therefore, since claim 5 is rejected, claim 35 is also rejected for the reasons above.

43. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morris as applied to claim 1 above, and further in view of Davies et al. (6,664,891).

44. For claim 15, Morris does not expressly disclose how the first information is formatted. Davies teaches a method (abstract) of information delivery within wireless networks (col. 1, line 1 – col. 4, line 30) in which the first information is formatted according to a markup language (col. 8, lines 14-16). At the time the invention was made, one of ordinary skill in the art would have used the markup language in Morris to determine implementation features of the message system and to provide a system that would make it easier for users to develop service advertisements (col. 8, lines 8-20).

Conclusion

45. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They relate to further teachings regarding ad-hoc networks and piconets, with specific emphasis on tree structures and OSPF.

46. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin H. Pollack whose telephone number is (571) 272-3887. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MHP

28 April 2006

JASON CARDONE
SUPERVISORY PATENT EXAMINER